

REMARKS

This Amendment is responsive to the Office Action dated May 31, 2005. Applicant has amended claims 1, 3, 5, 18-22, 25 and 26. Claims 1-28 are pending. However, claims 10-17 have been withdrawn from consideration.

Claim Rejection Under 35 U.S.C. § 112, second paragraph

In the Office Action, the Examiner rejected claims 1-9 and 18-28 under 35 U.S.C. 112, second paragraph, as being indefinite. Applicant respectfully traverses this rejection. The claims, as originally filed, are sufficiently clear to permit one skilled in the art to appreciate the metes and bounds of the invention. In the interest of expediting prosecution toward allowance, however, Applicant has amended claims 1, 3, 5, 18-22, 25 and 26 for purposes of clarification.

Amended claim 1 specifies that the “maximum level” and “minimum levels” refer to operating levels of color channels of a display. In addition, claim 1 refers to a “respective color channel” and “other color channels.” The “respective” color channel is the particular color channel (among the plurality of color channels) for which the cumulative emission spectrum is measured at a given time. The “other” color channels are those for which the cumulative emission spectrum is not measured during measurement of the cumulative emission spectrum for the respective channel. Amended claim 1 now more clearly provides antecedent basis for “the light sources” and “the respective color channels.”

Applicant submits that pending claims 1-9 and 18-28 satisfy the requirements of 35 U.S.C. 112, second paragraph. Applicant requests withdrawal of this rejection.

Claim Rejection Under 35 U.S.C. § 102

In the Office Action, the Examiner rejected claims 18-20 and 22-24 under 35 U.S.C. 102(b) as being anticipated by Rawicz et al. (USPN 6,116,650). Applicant respectfully traverses the rejection. Rawicz et al. fails to disclose each and every feature of the claimed invention, as required by 35 U.S.C. 102(b), and provides no teaching that would have suggested the desirability of modification to include such features.

For example, Rawicz et al. fails to teach or suggest determining a single-channel emission spectrum for each of a plurality of color channels of a display based on a measured emission spectrum and a light leakage spectrum for a respective one of the plurality of color channels, as recited by Applicant’s independent claim 18.

In the Office Action, the Examiner stated that Rawicz et al. teaches the features of Applicant's claim 18. However, Rawicz et al. fails to teach any of the features of Applicant's claimed invention. Instead, Rawicz et al. describes color matching of slightly colored objects which are transparent, diffusing, and absorbent, such as teeth and dental prostheses.¹ Rawicz et al. does not describe a measured emission spectrum or a light leakage spectrum of a color channel. In fact, Rawicz et al. never even mentions color channels of a display. Consequently, Applicant is confused by the Examiner's reliance on Rawicz et al.

In support of the rejection, the Examiner referred to column 5, lines 1-25, in the Rawicz et al. reference. However, this passage of Rawicz et al. describes illuminating a tooth in a mouth with polychromatic light and measuring reflectance of the tooth at three well-determined wavelengths. Rawicz et al. goes on to describe calculating pigmentation and saturation of the tooth based on the three reflectance measurements. Contrary to the Examiner's assertion, Rawicz et al. fails to describe measuring an emission spectrum and calculating a light leakage spectrum for a color channel of a display. Indeed, Rawicz et al. makes no mention of color channels in a display. Rawicz et al. instead refers to wavelengths at which reflectance from a transparent object is measured.

In regard to Applicant's dependent claim 19, Rawicz et al. also fails to teach calculating the light leakage spectrum based on a measured emission spectrum for the display at a minimum display level and assumed emission spectra for light sources within the display. In the Office Action, the Examiner asserted that Rawicz et al. describes calculation of pigmentation values with the assumed brightness corresponding to assumed emission spectra of light. However, Rawicz et al. describes calculating pigmentation values and assuming a brightness value based on measured reflectance at three wavelengths from a transparent object. The Rawicz et al. reference never mentions calculating a light leakage spectrum. Furthermore, Rawicz et al. does not describe a measured emission spectrum for a display or any of the other features of Applicant's claimed invention.

Rawicz et al. also fails to teach assuming the emission spectra for the light sources using a color channel reconstruction method, as recited by Applicant's dependent claim 20. The Examiner referred to column 5, lines 1-30, of the Rawicz et al. reference as teaching the features of Applicant's claim 20. However, this passage of Rawicz et al. describes illuminating a tooth in a mouth with polychromatic light, measuring reflectance of the tooth at three well-determined wavelengths, and determining pigmentation and saturation of the tooth.

¹ Rawicz et al., Abstract.

Rawicz et al. never mentions a color channel reconstruction method, much less the use of such a method in conjunction with a method for determining an emission spectrum for color channels of a display.

In regard to Applicant's dependent claim 22, Rawicz et al. does not describe a measured emission spectrum for a respective color channel operating at a maximum level and other color channels of the plurality of color channels operating at minimum levels. In the Office Action, the Examiner pointed to column 5, line 15 and column 5, line 54 for such a teaching. At column 5, line 15, however, the Rawicz et al. reference describes the middle wavelength of the reflectance measurements being close to maximum spectral sensitivity of the human eye. In addition, column 5, line 54, of the Rawicz et al. reference describes a minimization parameter used to determine the shade of a dental prosthesis that best matches the shade of the tooth in the mouth. Clearly, Rawicz et al. fails to teach color channels operating at maximum or minimum levels in a display. Again, the Rawicz et al. reference fails to even mention color channels in a display.

In order to support an anticipation rejection under 35 U.S.C. 102(b), it is well established that a prior art reference must disclose each and every element of a claim. This well known rule of law is commonly referred to as the "all-elements rule."² If a prior art reference fails to disclose any element of a claim, then rejection under 35 U.S.C. 102(b) is improper.³

Rawicz et al. fails to disclose each and every limitation set forth in claims 18-20 and 22-24. Rawicz simply provides no teaching pertinent to color channels in a display. For at least these reasons, the Examiner has failed to establish a prima facie case of anticipation of Applicant's claims 18-20 and 22-24 under 35 U.S.C. 102(b). Applicant requests withdrawal of this rejection.

Allowable Subject Matter

In the Office Action, the Examiner indicated that claim 21 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. For at least

² See *Hybritech Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 231 USPQ 81 (CAFC 1986) ("it is axiomatic that for prior art to anticipate under 102 it has to meet every element of the claimed invention").

³ *Id.* See also *Lewmar Marine, Inc. v. Barient, Inc.* 827 F.2d 744, 3 USPQ2d 1766 (CAFC 1987); *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (CAFC 1990); *C.R. Bard, Inc. v. MP Systems, Inc.*, 157 F.3d 1340, 48 USPQ2d 1225 (CAFC 1998); *Oney v. Ratliff*, 182 F.3d 893, 51 USPQ2d 1697 (CAFC 1999); *Apple Computer, Inc. v. Articulate Systems, Inc.*, 234 F.3d 14, 57 USPQ2d 1057 (CAFC 2000).

the reasons described above, Applicant's independent claim 18, on which claim 21 depends, is in condition for allowance. Consequently, claim 21 in its present form is in condition for allowance.

The Examiner further indicated that claims 1-9 and 25-28 would be allowable if rewritten or amended to overcome the rejections under 35 U.S.C. 112, second paragraph. In this amendment, Applicant has amended the claims for purposes of clarification. Applicant submits that claims 1-9 and 18-28, as amended, particularly point out and distinctly claim the subject matter, as required by 35 U.S.C. 112, second paragraph. Consequently, claims 1-9 and 18-28 are in condition for allowance.

CONCLUSION

All claims in this application are in condition for allowance. Applicant respectfully requests reconsideration and prompt allowance of all pending claims. The Examiner is invited to telephone the below-signed attorney to discuss this application.

Respectfully submitted,



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If the Examiner is unable to reach the Applicant(s) Attorney at the telephone number provided, the Examiner is requested to communicate with Eastman Kodak Company Patent Operations at (585) 477-4656.